Family physicians in Switzerland: transition from residency to family practice

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Abstract: Family physician tutors should actively approach trainees in medical school and residency, pointing out the advantages of family medicine in terms of continuity of patient contact and the wide range of illnesses and patients, as well as the prospect of a work-life balance tailored to personal needs. Unlike other countries, Switzerland started its structured residency-training programs only recently.

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Family Physicians in Switzerland: Transition From Residency to Family Practice

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BACKGROUND AND OBJECTIVES: The study is concerned with family physicians in the transition phase from residency to practice. Factors relating to the decision to take up a career in family medicine rather than a different medical career are investigated. Further, incentives and disincentives for starting a family practice as well as factors influencing the decision about practice location and practice model are addressed.

METHODS: In a prospective cohort study on physicians' career development, 88 family physicians and 437 physicians aspiring to a different medical career participated in a questionnaire survey on the reasons for their choice of specialty and career, their mentoring support, and their work-life balance aspirations. Quantitative and qualitative data were analyzed using hierarchical logistic regression and content analysis, respectively.

RESULTS: The hierarchical multivariate analysis reveals that the reasons for choosing a particular specialty, such as continuity of physician-patient relationship, variety within the specialty, and short specialty training, taking into account sociodemographic factors, have a significant impact on the decision to embark on a career in family medicine. Mentoring support and focus on career advancement are important predictors for choosing a career in another medical field, and the low level of manageability is a deterrent factor for family medicine. Important supporting factors for going into family practice are personal experience of such a practice and trusting relationships with family physicians throughout medical school and residency. The main obstacles indicated are the high costs involved in taking on a practice and the limited availability of practice licenses. Family constraints and conditions that promote a good work-life balance are cited as decisive for the family practice location. Personal and professional relationships with family physicians and the potential for flexible working hours influence the practice model.

CONCLUSIONS: Family physician tutors should actively approach trainees in medical school and residency, pointing out the advantages of family medicine in terms of continuity of patient contact and the wide range of illnesses and patients, as well as the prospect of a work-life balance tailored to personal needs. Unlike other countries, Switzerland started its structured residency-training programs only recently..

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The last decade has seen a marked shift away from family medicine to other medical specialties in the health care systems of most Western countries, especially those that are market orientated.[1-5] The main reasons for the waning interest in family medicine are low income, lower status, and the lower prestige of family physicians compared to other medical specialists.[6-8] Health policymakers, medical associations, medical schools, and communities have become aware of the necessity of efforts to increase interest in family medicine among medical students and graduates.[9] Over the last few years, family medicine has finally become established as an academic discipline in Swiss medical schools, providing early exposure to patients, longitudinal clinical experience, and clinical clerkships with community-based physicians during medical training.[1,10] As reported in several studies, such measures are essential to increase students' motivation to choose family medicine as a career.[11-15]

In Switzerland, a shortage of family physicians able to provide basic health care for the population has already become a reality in some regions—and not only in rural areas.[16] To date, there has been a lack of studies investigating which factors

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provide incentives or disincentives in the transition phase from residency to practice. The present paper aims to fill this gap.

Launched in 2001, the Swiss-MedCareer Study[17] is the first prospective study of young physicians' career development in German-speaking countries. The present paper focuses on study participants specializing in primary care, general internal medicine, or general pediatrics, whose career goal is to run a family medicine practice. The following issues were investigated: How do (future) family physicians differ from study participants aspiring to other medical careers in terms of (1) sociodemographic factors and (2) career-related factors, as well as reasons for choice of specialty? (3) Which factors are perceived as incentives and which as disincentives for starting a family practice? (4) Which factors influence the decision as to the location and model of the family practice?

Methods

Study Design and Study Sample

The study is part of an ongoing prospective survey of a cohort of graduates (SwissMedCareer Study), which began in 2001 (T1)[17] and covers the three medical schools in German-speaking Switzerland. Subjects were reassessed every 2 years by means of a postal questionnaire. The present paper refers to data obtained at the fifth assessment (T5 in early 2009). By T5, subjects are in their eighth year after graduation. To ensure participants' anonymity, the returned questionnaires are identified by a code only. The respondents send their addresses to an independent address-administration office, which permits follow-up. The study was approved by the Research and Ethics Committee of the University of Zurich.

At T5, 579 physicians (292 females (50.4%), 287 males (49.6%) participated in the questionnaire survey (81.4% of the initial sample at T1). In terms of medical career aspirations, 54 (9.3%) of the respondents were as yet undecided. Eighty-eight (15.2%) of the participants wished to work as family physicians, of which 48 (54.5%) had specialized in primary care, 34 (38.6%) in internal medicine, three (3.4%) in pediatrics, and three (3.4%) had yet to make a definite decision concerning specialty. For details of the training curriculum of the three board-certified family medicine specialties, see Table 1.

To analyze the first two issues of the present paper, the 88 family physicians were compared with the 437 physicians who had opted for a different medical career. In the spring of 2009, an additional questionnaire was sent out to the 88 family physicians only, requesting further details in relation to family practice. Of the 84 respondents, 32 (38.1%) were currently working in a family practice, while the others were still working as residents or senior physicians in hospitals, but aspired to work in a family practice in the near future. There were no differences between those already working in a practice and those still employed in a hospital in terms of sociodemographic and career-related factors, reasons for choice of specialty, and experience of incentives/disincentives in starting a family practice.

Instruments

Questionnaire at T5, Aimed at All Participants in the Swiss-MedCareer Study[17]

- Questions concerning sociodemographic data, choice of medical specialty, and career aspirations.
- Questions on reasons for choice of specialty.[18,19]
- The Mentor-Protégé Relationships Questionnaire20 (Likert scale 0–4), consists of five scales measuring different types of career support. We used the Networking Scale (four items) and the Support in Career Planning Scale (three items) and combined them into one scale termed the "Mentoring Support Scale," with a high Cronbach's alpha (=0.93).
- Work-life Balance (5-point Likert scale)[21] investigates which of four different models of work-life balance the participants aspire to within 5 years. The present study includes the models "career advancement" and "part-time work" only.

Additional Questionnaire at T5, Aimed Only at Participants With Family Medicine as Their Career Objective. Some of the questions were developed by an expert

Table 1: Family Physicians in Switzerland

Board-Certified Family Medicine Specialties	Training Curriculum
Primary care	• Two years: training in internal medicine • One year: training in an accredited family practice • Two years: training in specialties of the resident's own choice
General internal medicine	• Three-and-a-half years: training in general internal medicine • One-and-a-half years: training in two or three of the subspecialties of internal medicine
General pediatrics	• Three years: training in an accredited pediatric hospital • One year: training in an accredited pediatric practice • One year: training in pediatrics-related specialties

panel consisting of family physicians, health policymakers, and our research group. Further items were derived from a focus-group interview of study participants aspiring to careers as family physicians.[1] The third source of items is the questionnaire survey of the SwissMedCareer study at T4.[9,18]

- Questions relating to support factors in starting a family practice (multiple answers possible): relationship with family physicians during clerkship in medical school or in residency, removal of the restriction on obtaining a new family practice license, support from the community in terms of practice facilities and financial incentives, group-practice model with flexible working hours.

- Questions on factors representing obstacles to starting a family practice (multiple answers possible): constraints on obtaining a new family practice license, high costs involved in taking on a practice, difficulties in obtaining a loan, lack of flexibility in terms of location, lack of compatibility with practice partner, lack of information about taking on a practice.

- Questions on crucial factors regarding practice location and practice model (open-ended)

Statistical Analyses

All analyses were carried out using SPSS for Windows, Version 15 (SPSS Inc, Chicago). Descriptive statistics are given in terms of counts and percentages or means and standard deviations. A hierarchical logistic regression analysis was conducted to investigate factors influencing the decision to start a career in family medicine: in the first step, we included the sociodemographic factors; in the second step, the career-related factors, while still taking account of the sociodemographic factors; and in the third step, the reasons for choice of specialty, controlled for sociodemographic and career-related factors. Odds ratio, 95% confidence intervals, and Nagelkerke R2 are reported.

The qualitatively assessed data were evaluated by the first author on the basis of Mayring's content analysis.[22] Based on the transcribed answers, content categories were inductively formulated and their descriptions noted in a code manual. Answers were subsequently assigned to the content categories in accordance with the code manual. Frequency distributions are given for categories. Inter-rater reliability: The total complement of statements analyzed was submitted to another researcher for categorizing. Cohen's Kappa was calculated and determined to be 0.82.

Results

Characteristics of Family Physicians Compared to Physicians Aspiring to Other Careers in Medicine

As seen in Table 2, (future) family physicians differ from other specialists in their current life situation in that they are significantly more often married and more often have children. The level of employment of family physicians differs significantly from that of other specialists, with only two thirds of family physicians working full time as opposed to more than 80% of physicians in other branches of medicine.

Career-related Factors and Reasons for Specialty Choice—Comparison Between Family Physicians and Physicians Aspiring to Another Career in Medicine

As can be seen from Table 3, there are significant bivariate associations (unadjusted odds ratio [OR]) between the independent variables "having children," "mentoring support," "career advancement," and "part-time work" and all factors addressing "reasons for specialty choice" on the one hand and the dichotomous outcome variable ("family medicine" versus "another medical career") on the other

Table 2: Characteristics of Future Family Physicians and of Physicians Aspiring to Another Career in Medicine

	Family Physicians (n=88) n (%)	Physicians Aspiring to Another Medical Career (n=437) n (%)	*P* Value
Gender			.470
Male	42 (47.7)	227 (51.9)	
Female	46 (52.3)	210 (48.1)	
Age in years			.292
Average (SD)	35.42 (2.8)	35.10 (2.2)	
Range (in years)	31–47	31–50	
Current living situation			
Married	54 (62.1)	212 (48.7)	.009
Partnership	77 (87.5)	385 (88.5)	.789
Partner is a physician	22 (27.8)	144 (37.4)	.107
Children	46 (52.3)	147 (33.7)	.003
Level of employment			.004
≤50%	13 (16.0)	39 (9.2)	
60%–90%	17 (21.0)	36 (8.5)	
100%	51 (63.0)	347 (82.2)	

SD—standard deviation

hand. "Part-time work," "continuity of physician-patient relationships," "variety within the specialty," and "short specialty training" are positively associated (OR > 1) with the choice of family medicine as a specialty. "Mentoring support," "career advancement," and "manageability of the specialty" are negatively associated (OR < 1) with family medicine. Physicians aspiring to other careers in medicine are more likely to have mentoring support and to focus on career advancement, while manageability of the specialty has an impact on their career and choice of specialty.

In the hierarchical multivariate logistic regression analysis (Table 3), the first step indicates that parenthood constitutes a significant factor in the choice of family medicine as a career; in the second step, mentoring support and career advancement are significantly associated with the likelihood of aspiring to another career in medicine. In this second step, the gender factor proves to be a suppressor variable, ie, gender is associated with the career-related variables but not with the outcome variable of family medicine. Including gender as a factor and weighting it

Table 3: Results of the Hierarchical Logistic Regression Analysis Between Independent Variables and a Career in Family Medicine Versus Another Medical Career (n=525)

Dependent Variable	Unadjusted OR	95% CI for OR	OR (Step 1)	95% CI for OR (Step 1)	OR (Step 2)	95% CI for OR (Step 2)	OR (Step 3)	95% CI for OR (Step 3)
Step 1			Δ Nagelkerke R^2=0.05, $Chi^2(2)$= 13.34, P≤.001					
Sociodemographic factors								
• Gender (female)	1.18	0.75; 1.87	1.23	0.76; 1.98	0.40**	0.22; 0.74	0.21***	0.10; 0.45
• Children	2.16***	1.36; 3.43	2.42***	1.50; 3.90	1.65	0.95; 2.87	1.32	0.70; 2.49
Step 2					Δ Nagelkerke R^2=0.32, $Chi^2(3)$= 110.61, P≤.001			
Career-related factors								
• Mentoring support	0.59***	0.47; 0.75			0.74*	0.55; 0.99	0.63**	0.44; 0.89
• Career advancement	0.28***	0.21; 0.38			0.29***	0.21; 0.42	0.27***	0.19; 0.40
• Part-time work	2.10***	1.55; 2.85			1.22	0.84; 1.76	1.38	0.91; 2.07
Step 3							Δ Nagelkerke R^2=0.17, $Chi^2(4)$= 66.49, P≤.001	
Reasons for specialty choice								
• Continuity of physician-patient relationships	3.00***	2.01; 4.47					2.92***	1.69; 5.03
• Variety within specialty	2.44***	1.41; 4.23					3.10**	1.48; 6.49
• Manageability of specialty	0.60***	0.45; 0.79					.38***	0.25; 0.58
• Short specialty training	1.72***	1.25; 2.37					2.53***	1.63; 3.92
Total							Nagelkerke R^2=0.54, $Chi^2(9)$= 190.44, P≤.001-	

OR—odds ratio

CI—confidence interval

* $P \le .05$, ** $P \le .01$, *** $P \le .001$

negatively helps to explain the outcome. The effect of parenthood loses its significance, with career-related factors displaying a stronger association with family medicine. The third step in the hierarchical analysis shows that all factors involved in the choice of specialty impact significantly on the decision in favor of family medicine or a career in another medical specialty. Continuity of physician-patient relationships, variety within specialty, and short specialty training are positively associated with family medicine, whereas the manageability of the specialty is negatively associated with it.

In summary, physicians choosing family medicine value the possibility of part-time work, continuity of physician-patient relationships, variety within the specialty, and short specialty training. Physicians aspiring to other careers in medicine are deterred from family medicine explicitly because of the low manageability of family medicine and implicitly because of their greater focus on career advancement.

Incentives and Disincentives to Starting a Family Practice

In the additional questionnaire, 84 family physicians reported which factors they experienced as positive in relation to starting a family practice and which factors they perceived as obstacles. As listed in Table 4, personal experiences in a family practice and relationships of trust with family physicians, either during medical school or during residency, were mentioned by the respondents as being important when planning to start a family practice. Financial factors are less often rated as crucial in the starting phase of a practice. The principal obstacles cited were the restrictions on obtaining a new practice license and the high costs involved in taking over a practice. There are no differences in the experiences reported by family physicians who have already started a family practice and those who are in the planning and transition phase prior to opening a family practice (all *P* values > .05).

Factors Influencing the Decision on Practice Location and Practice Model

In response to the open-ended question "What factors positively influence the decision as regards practice location and practice model?" 209 answers (average 2.5 answers per participant) were given and categorized according to Mayring's22 content analysis. In Table 5, the entries are listed for each category in order of ranking. Family reasons and conditions promoting a good work-life balance such as proximity of practice to home, possibility of child care by family members, leisure facilities, good public infrastructure, flexible working hours, and part-time work account for almost half of the answers as to the decision of where to start a practice, as well as choice of practice model. Personal and professional relationships of trust with practice partners as well as the professional network are important factors in deciding on practice model and practice partners.

Discussion

In Switzerland, family medicine is a 5-year degree course, whereas most other medical specialties entail 6 or more years of study. After qualifying in their specialty, most physicians remain employed in hospital as senior physicians for several years before starting their own practice. This explains why only 38% of study participants who specified a leaning toward family medicine were actually working in a family practice 7 years after graduating from medical school.

Differences in Sociodemographic Factors

In our cohort, both male and female family physicians tended to be married and have children more often than their colleagues who had embarked on different career paths. Our

Table 4: Ranking of Incentives and Disincentives for Starting a Family Practice (Multiple Answers Possible)

Supporting Factors	Family Physicians (n=84) n (%)
Residency in a family practice	52 (62.7)
Personal relationship with a family physician	50 (60.2)
Flexible working hours	49 (59.0)
Deputy in a family practice	40 (48.2)
Relationship with family physicians in medical school	35 (42.7)
Contact with location while working in hospital	31 (37.3)
Support from community (financial incentives, practice facilities)	29 (34.9)
Revocation of the restriction on opening new practices	25 (30.1)
Professional solidarity among family physicians	15 (18.1)
Other	6 (7.2)
Obstacles	
Restrictions on obtaining a new practice license	42 (51.2)
High costs of practice takeover	37 (45.1)
Difficulties in obtaining a loan	30 (36.6)
Low regional flexibility in terms of practice location	22 (26.8)
Lack of compatibility with practice partner	17 (20.7)
Absence of information on practice takeover	16 (19.8)
Other	18 (22.0)

data do not clarify whether medical school graduates attaching high value to having a family choose this career path because a family practice guarantees better compatibility of work and family life. The British 1995 Cohort Study[23] reports that during postgraduate training, the percentage of physicians switching from another career path to family practice almost doubled. The main reasons cited for this change were domestic circumstances and the option of reduced working hours. In many other specialties, especially in surgical fields, it is more difficult to work part time.[24,25]

Looking at the sociodemographic differences between the two study groups (family physicians versus physicians in other medical careers), levels of employment are also different. Family physicians often work part-time (37% in our study). Other authors from Great Britain23-26 report that 65% of family physicians currently work part time. Despite this, the Canadian 2007 National Physicians Survey27 reported that family physicians do not work fewer hours than other specialists.

Career-related Factors and Reasons for Choice of Specialty

Unlike in other studies,[2,28,29] gender does not play a decisive role in the choice of family medicine in our study but is merely a suppressor variable, ie, it correlates with career-related factors but not with the decision to pursue a career in family medicine.

Family physicians do not see themselves as focusing on career advancement,[2,7] although they often achieve their personal career goal of opening their own private practice long before physicians in other specialties. In medicine the term career is associated to a greater extent with a career in hospital or in academic medicine.

Physicians aspiring to a different career in medicine have more mentoring support. As discovered in our study30 and reported by other authors,31 mentoring is a key factor in career success, especially in hospital and academic medicine. In family medicine, mentoring does not have the same importance as far as career success is concerned as it does for other medical specialties.

As found in our study and others, reasons for choosing family medicine include working in and being part of

Table 5: Frequencies of Entries Per Category: Factors Influencing the Decision on Practice Location and Practice Model in Order of Ranking

Rank	Category	Definition	Examples	Total n (%)
1	Family reasons/work-life balance	Familiarity with region/practice close to home/child-care facilities	• Region where I grew up • Child care by grandparents • Leisure facilities	55 (26.3)
2	Part-time work/flexibility/off-hour conditions	Flexibility in relation to working hours and organization of work	• Colleagues able to act as deputies during holidays • Well-regulated emergency service	46 (22.0)
3	Regional factors	Patient spectrum/population structure/public infrastructure facilities/rural or metropolitan region	• Broad patient spectrum, including children, in rural area • Urban agglomeration with good infrastructure and increasing population	28 (13.4)
4	Good relationship with practice partner/group practice with spouse/family member	Trusting and friendly relationship among colleagues and practice partners	• Personal and professional relationship with practice partners from working together elsewhere	23 (11.0)
5	Professional intervision/ professional teamwork and network	Group practice, opportunity for professional support and knowledge exchange	• Transfer of interdisciplinary skills and expert knowledge	20 (9.6)
6	Economic factors	Advantageous financial conditions	• Low average fixed costs • Low practice-takeover price	19 (9.1)
7	Good conditions for practice takeover	Facilitated conditions for practice takeover	• Practice taken over from a family member • Practice offer at the right time at a convenient location	12 (5.7)
	Uncodable	—	—	6 (2.9)
	Total			209 (100)

a team, continuity of patient contact, wide range of illnesses and people encountered, dislike of or disillusionment with hospital and highly specialized medicine, and an increasing awareness of part-time opportunities.2,18 Reasons for the trend away from family medicine may be that medicine is an ongoing process of increasing specialization, and the more this process develops, the more difficult it becomes for a physician to keep up with the full spectrum of medicine. Consequently, graduates are seeking areas of specialization in which they feel they can achieve a reasonable level of competence. Further, low professional prestige and the prospect of low remuneration in family medicine affect career choice.6,8,32

Incentives and Disincentives to Starting a Family Practice

The findings in our study are consistent with other reports.[1,11-15] Early contact with family physicians during medical school and residency is important for the choice of a certain group practice and location.33 Professional relationships of trust with practicing family physicians built up in the (post)graduate training phase support the junior physicians in the somewhat uncertain phase from residency to practice. Family physician tutors frequently act as mentors for the juniors.[10]

A further support factor for starting a family practice is flexible working hours. As already reported in the British Cohort Study,[23] general practice is tending to become more popular with junior physicians because it is seen as offering a better work-life balance. Similar results have been noted in our study.

The main disincentive cited regarding the transition phase prior to opening a practice was the restriction on new practice licenses. Enacted in 2002, the legislation was only revoked for family physicians in rural areas in the summer of 2009. This factor keeps junior physicians in hospitals, where they often use the opportunity to obtain further specialist qualifications; in the long run, some may abandon their original goal of a career in family medicine.

The high costs involved in taking on a practice represent a further disincentive. In the Swiss health care system, physicians in private practices are self-employed. Many senior physicians hope to sell their practice, their license, their practice equipment, and especially their list of registered patients when they retire.

Factors Influencing the Choice of Practice Location and Practice Model

As found in our own studies and others[7,23,34,35] and confirmed by the present data, family physicians place a high value on a good work-life balance. This has implications first and foremost for the ideal number and timing of their working hours (ie, part time and flexible)[36] and secondly for the decision on where to set up their practice. Child care and leisure facilities as well as good public infrastructure are among the most important factors mentioned. In countries with a free-market-based health system,37 physicians can choose to some extent where to open their private practice; evidence of a trend toward practicing in urban areas rather than rural regions has been noted. As in other countries,38-40 primary care is no longer provided by individual family physician practices, even in rural areas, but by group practices.

Limitations and Strengths of the Study

Some limitations of the study must be mentioned. The number of cohort doctors pursuing family medicine is rather small. Of these, only one third have already started a practice, while the rest are still in the transition phase. Nevertheless, there are no significant differences between the two groups. Further, the findings are specific to Switzerland. Strengths of the study are the combination of quantitatively and qualitatively assessed data and the comparison between family physicians and physicians aspiring to other careers in medicine.

Conclusions

Family physician tutors should actively approach trainees in medical school and residency, establishing personal relationships of trust with juniors and mentoring them for a career in a family practice. Communities should aim to attract family physicians by providing good child-care facilities as well as offering good practice facilities.

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